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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,134	10/31/2003	John Montminy	SGL 03/6	3469
24131	7590	12/16/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			HOANG, TU BA	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/699,134	MONTMINY ET AL. <i>al</i>	
	Examiner	Art Unit	
	Tu Ba Hoang	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/31/03</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

### ***Drawings***

Figures 1a, 1b, and 3a should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, there is insufficient antecedent basis for "The threaded..." recited in the preamble since this is the first occurrence of the claimed assembly. Therefore, "The" should be changed to "A". The phrase "said thread windings" recited at line 13 also lacks antecedent basis in the claim since as noted at line 7, only a singular thread winding was recited.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Burwell (US 4,679,206). Burwell shows all features of the claimed invention including an assembly with a threaded connection (Figure 3) comprising an outer part carbon ceramic electrode 11 having an internal thread (or socket), an inner part carbon ceramic electrode pin 12 having an external thread, wherein the internal and external threads have thread windings with a substantially uniform lead, a root 18, a crest 20, and a substantially V-shaped profile and can be either cylindrical threads or conical threads, and at least one of the internal and external threads is inherently formed with a wedge ramp (or thread flanks) 19b at the root 18 (i.e., 19a or 19b as shown in Figure 2) and when the parts are screwed into one another, the crests 20 of one part abut with the wedge ramps 19b at the root of the other part (as clearly shown in Figure 3), and wherein the wedge ramp is also disposed on the root of the thread winding of the internal thread and formed on sections of the length of the thread winding and a surface of the wedge ramp 19b on the root 18 of the thread winding defines an angle of 30° (column 5, line 35 which is within the recited range in the range between 10° and 60°

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or lies in the range between  $25^{\circ}$  and  $35^{\circ}$  ) with a longitudinal axis of the parts 11,12 and has its projection from the root 18 is about 100% (which within the recited range of 30% to 100%) as long as the height of thread winding.

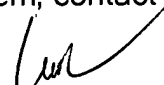
Claims 1-7 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Burwell (US 4,159,184). Burwell ('184) shows all features of the claimed invention including an assembly with a threaded connection (Figures 2 and 4) comprising an outer part carbon ceramic electrode 14 having an internal thread (or socket), an inner part carbon ceramic electrode pin 12 having an external thread, wherein the internal and external threads have thread windings with a substantially uniform lead, a root, a crest, and a substantially V-shaped profile and can be either cylindrical threads or conical threads, and at least one of the internal and external threads is inherently formed with a wedge ramp or thread flanks (18 or 28 as shown in Figures 2 and 4) and when the parts are screwed into one another, the crests 20 of one part abut with the wedge ramps 19b at the root of the other part, and wherein the wedge ramp is also disposed on the root of the thread winding of the internal thread and formed on sections of the length of the thread winding.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Kaufmann et al (US 2,957,716) Johnson (US 2,970,854), Kozak (US 3,708,601), Belz (US 4,349,910), and Palm (US 5,282,707).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-fri from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu Ba Hoang  
Primary Examiner  
Art Unit 3742

December 10, 2004